

May 24, 1989

TO: Holland Shepherd, Permit Lead

FROM: Scott Johnson, Reclamation Engineer *Scott*

RE: Review of the Reclamation Estimates for the Frank M Mine,  
M/017/017, and the Tony M and Lucky Strike Mines,  
M/017/001, Plateau Resources, Garfield County, Utah

I have re-evaluated the reclamation costs for the Plateau Uranium Mines in Garfield County. A Board Contract was issued for the Frank M Mine on July 27, 1979 for \$46,619.00. A similar Board Contract was issued for the Tony M and Lucky Strike Mines on October 16, 1980 for \$140,637.58.

The Frank M Mine has been idle since 1980. The decline was only driven 150 feet. The only surface disturbances are several concrete foundations, the decline, a water tank, and the improved roadway. I estimate the total surface disturbance to be three acres. The reclamation cost is estimated to be \$10,000.

The Lucky Strike Mine disturbance is mostly pre-law. Although the waste dump was used for several months after the Act was enacted, the Division subsequently released Plateau of reclamation responsibility for the waste dump. The portals are the only items at this site that require reclamation.

The Tony M Mine is adjacent to the Lucky Strike Mine and has been idle since 1984. The surface facilities include a large office complex (8000 sq. ft.), and a large shop (3000 sq. ft.). Several large concrete ore bins are located between the office and portal area. The file indicates a total surface disturbance of 52 acres. The reclamation cost is estimated to be \$142,000.

Both estimates are largely based on photographs. Actual surface disturbances were not clear in the file. A field visit will be needed to verify the acreages and number of openings. Also, the results of the revegetation test plots may significantly alter the revegetation estimate.

jb  
Attachment  
cc: Lowell Braxton  
MN17/39

## Reclamation Estimate for the Frank M Mine M/017/017

Prepared By  
Utah State Division of Oil, Gas and Mining  
May 23, 1989

Description	Quantity	Unit	\$/Unit	Total Cost (\$)
<b>Facilities Reclamation</b>				
Break-up and Bury Concrete Foundations	2,000	Square Feet	1.80	3,600
Demolish and Dispose of Water Tank		Lump Sum		1,500
Backfill Decline	600	Cubic Yards	0.65	390
Remove Trash	3	Acres	100	300
Grade for Uniformity	3	Acres	400	1,200
Revegetate (a)	3	Acres	447	1,340
				=====
Totals				8,330
Add Contingency (10%)				830
				-----
TOTAL RECLAMATION COST (1989 Dollars)				9,160
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				10,000

**Note:**

(a) Test plots were initiated at the Tony M Mine in 1987 by Plateau. The success of these plots will determine the required revegetation method.

Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
<b>Bare Costs</b>				
Fertilizer	100	Pounds	0.25	25
Seed Mix	20	Pounds	9.00	180
Native Hay Mulch	2	Tons	50	100
Subtotal				----- 305
<b>Application Costs</b>				
Native Hay Mulch (spread by hand)	3.0	Hours	24	72
Native Hay Mulch (disc into ground)	0.3	Hours	67	23
Fertilizer (broadcast by hand)	0.5	Hours	24	12
Seed Mix (drilled)	0.5	Hours	24	12
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				----- 142
Total Revegetation Cost per Acre				447

## Reclamation Estimate for the Tony M and Lucky Strike Mines M/017/001

Prepared By  
Utah State Division of Oil, Gas and Mining  
May 23, 1989

Description	Quantity	Unit	\$/Unit	Total Cost (\$)
<b>Tony M Facilities Reclamation</b>				
Demolish and Dispose of Buildings (2)	11,000	Square Feet	2.90	31,900
Demolish and Dispose of Ore Bins		Lump Sum		15,000
Regrade Waste Dumps (a)	5	Acres	800	4,000
Construct Bulkheads 100' Inside Portals (b)		Lump Sum		6,000
Backfill to Bulkheads (b)	3,000	Cubic Yards	0.65	1,950
Remove Trash	52	Acres	100	5,200
Grade for Uniformity	47	Acres	400	18,800
Revegetate (c)	52	Acres	447	23,240
Subtotal				106,090
<b>Lucky Strike Reclamation (d)</b>				
Construct Bulkheads 100' Inside Portals (b)		Lump Sum		6,000
Backfill to Bulkheads (b)	3,000	Cubic Yards	0.65	1,950
Revegetate (c)	8.2	Acres	447	3,670
Subtotal				11,620
Totals				117,710
Add Contingency (10%)				11,770
TOTAL RECLAMATION COST (1989 Dollars)				129,480
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				142,000

### Notes:

- The actual amount of disturbance is not available in the file. A site visit is needed to confirm this acreage.
- The total number of adits, shafts, declines, vent holes and portals is not available in the file. A site visit is needed to confirm the amount.
- Test plots were initiated in 1987 by Plateau. The success of these plots will determine the required revegetation method.
- The waste dumps at this mine are mostly pre-law and do not require reclamation.

# Reclamation Estimate for the Tony M and Lucky Strike Mines M/017/001

Prepared By  
Utah State Division of Oil, Gas and Mining  
May 23, 1989  
(continued)

Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
Bare Costs				
Fertilizer	100	Pounds	0.25	25
Seed Mix	20	Pounds	9.00	180
Native Hay Mulch	2	Tons	50	100
Subtotal				305
Application Costs				
Native Hay Mulch (spread by hand)	3.0	Hours	24	72
Native Hay Mulch (disc into ground)	0.3	Hours	67	23
Fertilizer (broadcast by hand)	0.5	Hours	24	12
Seed Mix (drilled)	0.5	Hours	24	12
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				142
Total Revegetation Cost per Acre				447



**Frank M Mine**

**Tony M and  
Lucky Strike Mines**

**Shootaring Mill Site**

## Plateau Resources

Frank M Mine    M/017/017

Tony M / Lucky Strike Mines    M/017/001

Garfield County, Utah